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09/863,381	05/24/2001	Robert A. Blanchette	600.516US1	9502

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EXAMINER

KIZILKAYA, MICHELLE R

ART UNIT	PAPER NUMBER
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1661

DATE MAILED: 06/20/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,381

Applicant(s)

BLANCHETTE

Examiner

KIZILKAYA

Group Art Unit

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—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 10/29/02
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-42 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-42 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Election Restriction

Applicant's election with traverse of Group I (claims 1-41) in Paper No. 8 is acknowledged. The traversal is on the grounds that restriction is optional and in adding group II (claim 42) such would not be a burden to examiner. Examiner does agree to search and examine the additional group. However, the restriction between the elected invention and groups III, IV and V are still deemed proper and are made final.

35 U.S.C. 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 42 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rahman et al.

Rahman teaches how to make agarwood. Albeit not exactly the same process, absent evidence to the contrary, the product made is assumed to be the same.

Furthermore, the 102/103 Product by Process claims have been approved by the Court, (MPEP 3112).

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35 U.S.C. 103(a)

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rahman et al in view of Blanchette et al. and Gibson.

Rahman discloses a method for producing agarwood. Said method of production was taught through experimentation conducted in July of 1977 in which numerous holes/wounds were made with bits and braces at several locations and in a number of positions at varying depths and in spiral patterns around many *Aquilaria agallocha* trees in order

“To compare the effects of wounding alone and with fungal inoculation on the formation of deposits of oleoresin in the wood”(p.88-90).

Rahman concluded,

“There was a close correlation between the open controls and profuse development of oleoresin”. Said statement clearly discloses and therefore teaches the method of providing a

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means for aerating the wound.

In order to create said holes with the disclosed tools or aeration devices, requires penetration of the tree by drilling. Wounding the tree by cutting to the various depths as taught by Rahman consequentially would breach, or in essence scribe the cambium. Thereby reaching the xylem and in doing so remove a patch of the cambium.

One of the tools used in order to bore holes, the bit, is similar to a screw in function and form as it comprises an exterior surface having grooves. Traditionally such a material, (including the brace) are a metal such as iron. However, a number of other organic materials would suffice. In order to not lose the bit to the interior of the tree one would have to resist boring, cutting or drilling the entire length of the device thereby permitting the aerating device to extend out from the exterior of the tree. For purposes of removal or manipulation said extension would have to be sufficient in length in order to handle or remove. So whether the device is a screw, a pipe or nail, such an implement would have to protrude from the wound if one is to extract or manipulate it in the attempt to re-wound.

Although applicant claims the aeration device is about 2 cm in diameter, Rahman indicates even a less is sufficient rendering applicant's claim arbitrary and an unnecessarily specific.

Rahman not only teaches the methods of wounding in pursuit of agar production. Additionally, he teaches the method of fungal infestation by inoculation in the formation of agar.

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Such a practice is known in the industry as being a resin or agar producing agent that stimulates resin or agar production. Given the known method of wounding to stimulate said production, it was foreseeable this method also became known to the industry, as fungi breaks down the trees' interior by destroying tissue fiber which is basically a wounding process or method in itself as such an agent kills parenchyma cells. Of the fungi used, the microbe, *Basidiomycota* which is a family of fungi, was specifically disclosed. In addition to *Basidiomycota*, Rahman discloses the testing of 2% malt agar, a chemical agent to kill cells locally.

Rahman does not disclose the method of observing discolored wood in order to determine the need to re-wound the tree. However, Blanchette discloses the motivation for re-wounding after discoloration from the initial wound has occurred. According to Blanchette, the quantity and intensity of discolored wood that occurs after initial wounding is dependent upon the depth and size of the injury within the xylem. Interactions of air with xylary tissue appear necessary for the development of discoloration, in all cases. (P.79) Furthermore,

“The reaction zone, in cells present within the wood at the time of injury or infection, results from processes..., associated with the discoloration of the xylem”.(p.85) Finally,

“When a tree is wounded, the cells generated after wounding close the wound”. and “complete wound closure should inhibit microbial processes dependent on gaseous exchange with the open wound”. The motivation for re-wounding is apparent here as well as Gibson's publication in which he stated,

“Oleoresinous deposits such as agar may arise from direct response of the stem tissues

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of *A. Agallocha* to wounds with subsequent invasion by weak pathogens. Clearly such is an indication that subsequent invasion, i.e. re-wounding is crucial.

Clearly such publicly available knowledge is an obvious indication of the need to re-wound areas in order to facilitate gaseous exchange as trees will typically respond to the initial injury through callous formation, a sort survival mechanism or response which must be interrupted in order to continue the agar formation process, hence the need to re-wound or more literally re-open the wound.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the methods of Rahman et al. in view of Blanchette et al. and Gibson by using any number of materials as a tool capable of cutting or damaging *Aquilaria* trees. it would have been obvious to use a nail, tube or pipe, harder than or as hard as the tree would suffice as being conducive to wounding. One would have been motivated to make the modifications specifically suggested by Rahman, and there would have been a reasonable expectation of success because all the starting materials and methods were already known and/or in use in the art.

With regard to the claim limitation that the device comprises aeration holes, such is an obvious modification as a pipe for example would serve to prevent the wound from healing as the opening would ensure gaseous and fungal exchange. Clearly this is a logical conclusion based on the available art.

With regard to a monthly re-wounding, or method of using trees less than 100 years old,

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or the utilization of trees not grown in an old growth forest, all such limitations are merely optimization of process parameters claimed, since the wounding response would be expected to occur in trees of any age, no matter where they are grown.

The invention as a whole was clearly *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

No claims allowed

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Future Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle R. Kizilkaya whose telephone number is (703) 308-4324. The Examiner can normally be reached Monday through Friday from 9:00 a.m to 5:30 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Bruce Campell, can be reached on (703) 308-4205. Additionally, the USPTO customer service department can be reached by pressing zero in the examiner's automated voice mail box system. The fax number is (703) 746-5252.

Any inquiry of a general nature or relating to the status of this application should be directed to the Matrix Customer Service Center whose telephone number is (703) 308-0196. specification, if available.

M.R. Kizilkaya

A handwritten signature in black ink that reads "Bruce Campell". The signature is written in a cursive, flowing style.

BRUCE R. CAMPELL, PH.D
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600